

FEB 28 2007

Docket No. 740709-507  
Application No.: 10/628,240  
Page 4 of 15**Amendments to the Specification:**

Please amend the paragraph beginning on page 5, line 3, of the Specification as follows:

The above-mentioned multilayer polyimide film preferably has a linear expansion coefficient (Machine Direction (MD), Traverse Direction (TD) and their average, at 50-200°C) of  $10 \times 10^{-6}$  to  $35 \times 10^{-6}$  cm/cm/°C.

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Please amend the paragraph beginning on page 5, line 24, of the specification as follows:

In FIG. 1, an intervening flexible thermoplastic polymer film 3 having a reverse pattern of a predetermined conduit pattern is placed between a pair of flexible thermoplastic polymer films (i.e. cover films) 2, 2'. On one cover film 2 is placed a heat conductive sheet 5. The multilayer structure of the heat conductive sheet 5, cover film 2, intervening film 3, and cover film 2' is heated under pressure. Thus, a composite structure is produced. In the structure, the cover film 2 and cover film 2' are firmly fused together via the intervening film 3 which produces a conduit pattern between the cover films. To the cover film 2 is fixed the heat conductive sheet. Then, a flexible film 6 having a heat radiant metal layer on one side is fixed to the heat conductive sheet 5. Subsequently, a fluid (gas or liquid such as ammonium gas, water, ~~fluorinated liquid (e.g., Florinate available from 3M Corporation)~~ FLORINATE (fluorinated liquid) available from 3M Corporation is introduced under pressure into the conduit pattern so as to produce the desired conduit, as is illustrated in FIG. 1. Thereafter, a set of an inlet tube 41 and an outlet tube 42 are fixed to the inlet and outlet of the conduit. Thus, the desired flexible heat exchanger 1 of the invention is manufactured.

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Please amend the paragraph beginning on page 6, line 14, of the specification as follows:

In the above-mentioned manufacturing method, it is preferred that the heat conductive sheet (or film) has a heat conductivity of 350 W/mk or higher and a thickness of 10  $\mu$ m to 2 mm. An example of the heat conductive sheet is ~~graphite sheet (e.g., PGS Graphite Sheet, available from Matsushita Electronic Parts Co., Ltd.)~~ PGS GRAPHITE SHEET (graphite sheet) available from Matsushita Electronic Parts Co., Ltd.

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Please amend the paragraph beginning on page 9, line 8, of the specification as follows:

Stainless steel sheet (SUS, 200 mm x 200 mm x 1.5 mm) - releasing polyimide film (~~Upilex S~~ available from Ube Industries, Ltd., UPILEX S (releasing polyimide film) available from Ube Industries, Ltd., 200 mm x 200 mm x 25  $\mu$ m) - silicone rubber sheet (150 mm x 150 mm x 1 mm) - polyimide films (~~Upilex S~~ UPILEX S, 200 mm x 200 mm x 25  $\mu$ m) - two flexible thermoplastic polyimide films I (100 mm x 100 mm x 25  $\mu$ m) - a set of heat insulating sheets forming a reverse pattern of a conduit pattern (see FIG. 2, made of ~~an aromatic polyamide non-woven cloth, Technola Felt, available from Teijin Corporation, 210 g/m<sup>3</sup>~~) TECHNOLA FELT (aromatic polyamide non-woven cloth, 210 g/m<sup>2</sup>) available from Teijin Corporation) - releasing polyimide film (~~Upilex S~~, UPILEX S, 200 mm x 200 mm x 25  $\mu$ m) - stainless steel sheet (SUS, 200 mm x 200 mm x 1.5  $\mu$ m).

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Please amend the paragraph beginning on page 9, line 32, of the specification as follows:

Stainless steel sheet (SUS, 200 mm x 200 mm x 1.5 mm) - releasing  
polyimide film (~~Upilex-S~~, UPILEX S, 200 mm x 200 mm x 25  $\mu$ m) - silicone  
rubber sheet (150 mm x 150 mm x 1 mm) - polyimide film (~~Upilex-S~~,  
UPILEX S, 200 mm x 200 mm x 25  $\mu$ m) - flexible thermoplastic polyimide  
film I (100 mm x 100 mm x 25  $\mu$ m) - copper foil having a conduit pattern (see  
Fig. 3, USLPR2-9, available from Japan Electrolysis Co., Ltd, thickness: 9  
 $\mu$ m) - flexible thermoplastic polyimide film I (100 mm x 100 mm x 25  $\mu$ m) -  
releasing polyimide film (~~Upilex-S~~, UPILEX S, 200 mm x 200 mm x 25  $\mu$ m) -  
stainless steel sheet (SUS, 200 mm x 200 mm x 1.5 mm).